



# Implications for a System of Care in Hawai'i for Integrated Care of Substance Use Disorder Treatment into Primary Care

PRESENTED BY:

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DATE: 9/26/2022

Coordinated by the Department of Psychiatry JABSOM University of Hawai'i  
in partnership with the Hawai'i State Department of Health, Alcohol & Drug Abuse Division (ADAD),  
Hawai'i Youth Services Network (HYSN), and the Hawai'i Interagency Statewide Youth Network of Care (HI-SYNC)



# Acknowledgments & Disclosures

Support for the writing and coordination of the Chapters of the State Plan for a System of Care was provided by the Hawai'i State Department of Health Alcohol and Drug Abuse Division (ADAD).

Dr. Quattlebaum and Kiyokawa do not have anything to disclose



# Learning Objectives

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After this talk, the audience will be able to...

- Describe at least one challenge related to primary care management of substance use disorders in Hawai'i
- Describe at least one recommendation to tackle the challenges in Hawai'i
- Describe the basic Collaborative Care Management (CoCM) model



# Disclaimer

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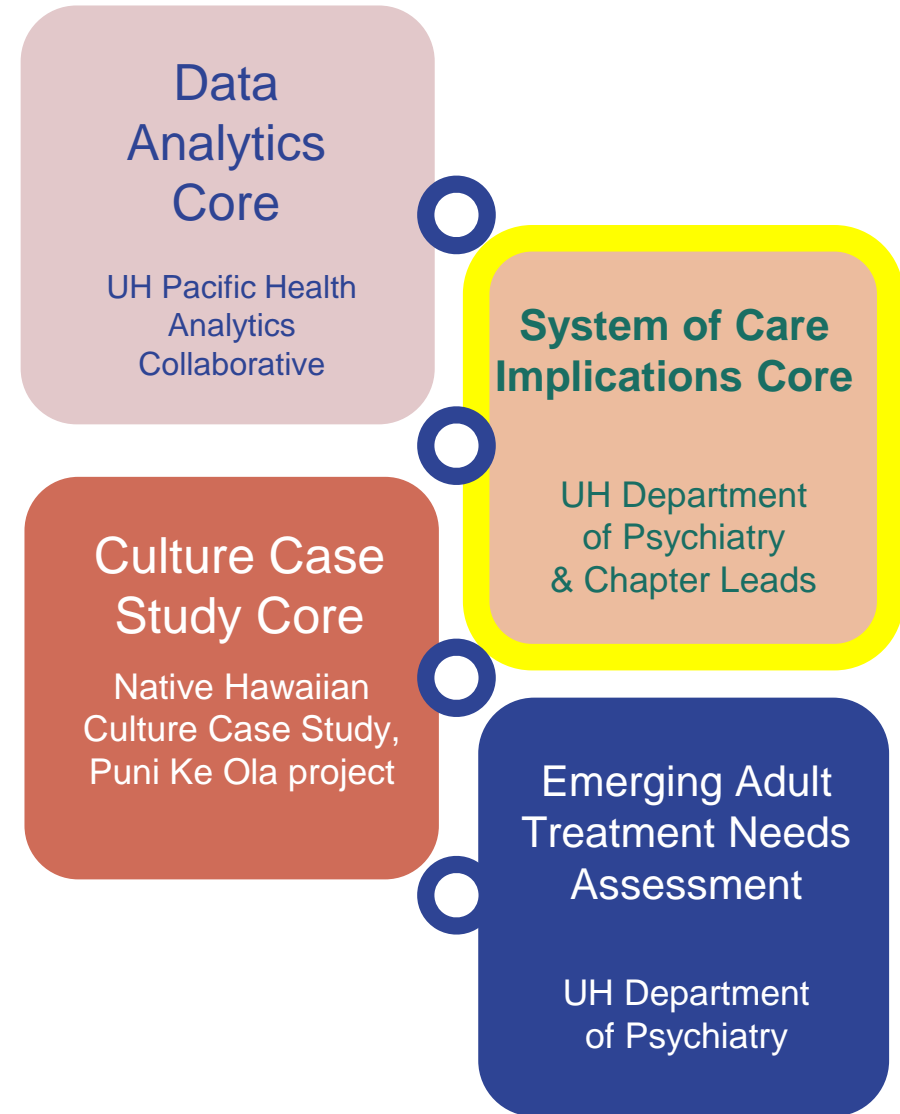
We unfortunately can't solve this problem overnight nor do we have all the answers.





## ADAD State Plan for a System of Care

The goal of this project is to assist ADAD in updating its state plan, which states the division's "efforts are designed to promote a statewide culturally appropriate, comprehensive system of substance use services to meet the treatment and recovery needs of individuals and families and to address the prevention needs of communities."





# SoC Chapters

The SoC Implications Core includes a set of reports which discuss the Systems of Care for the intersection of substance use and public sector or specific populations

## Substance Use & Public Sector

Mental Health

Homelessness

Criminal Justice

Juvenile Justice

Violence (IPV, DV, CAN)

## Substance Use & Populations

Rural

Native Hawaiian

Sexual & Gender  
Minorities

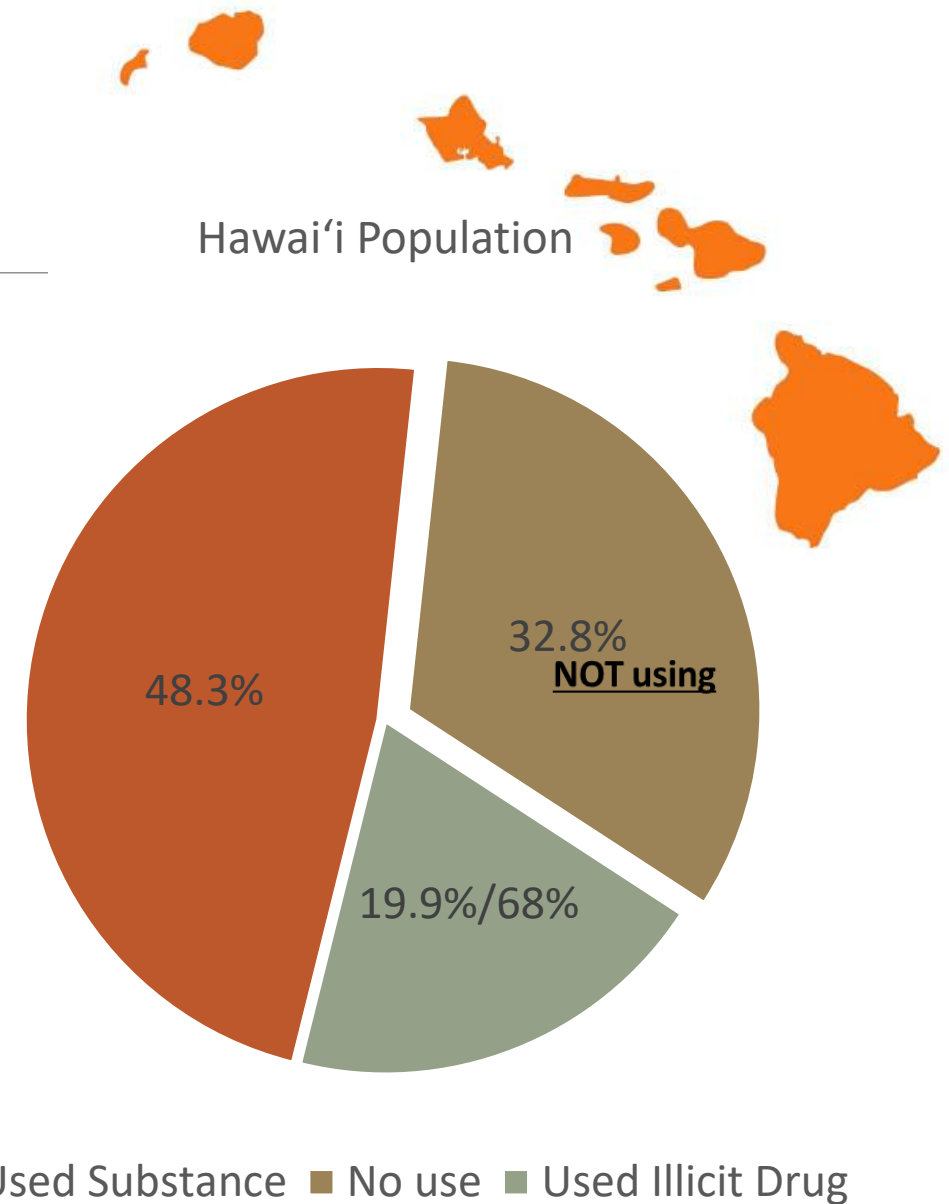
Pregnant & Parenting  
Women

Primary Care Integration



# Background

- **68.2%** of the population of Hawai'i used illicit drugs, tobacco products, or alcohol in the past year.
- **19.9%** used illicit drugs (including marijuana) in the past year
- Source: National Survey on Drug Use and Health (NSDUH) 2018-2019,







As we are all aware, Hawai'i has battled methamphetamine issues for a long time...





# *We are #1 for (+) methamphetamine in urine*

## Hawai'i – 410% higher than national average

Arkansas – 280%

Oklahoma – 240%

Nevada – 180%

California – 140%

Wyoming – 130%

Utah – 120%

Arizona – 100%, and

Kansas – 80%.





Published in final edited form as:

*Drug Alcohol Depend.* 2007 May 11; 88(2-3): 224–233.

## **Illicit Drug Use in Young Adults and Subsequent Decline in General Health: The Coronary Artery Risk Development in Young Adults (CARDIA) Study**

**Stefan G. Kertesz<sup>\*,†</sup>, Mark J. Pletcher<sup>‡,||</sup>, Monika Safford<sup>\*,†</sup>, Jewell Halanych<sup>\*,†</sup>, Katharine Kirk<sup>†,§</sup>, Joseph Schumacher<sup>\*</sup>, Stephen Sidney<sup>¶</sup>, and Catarina I. Kiefe<sup>\*,†</sup>**

In a **14-year** prospective study of young adults, baseline hard drug use including tobacco use was significantly associated with subsequent self-rated health decline as compared to those who never used.

Kertesz SG, Pletcher MJ, Safford M, Halanych J, Kirk K, et al. Illicit drug use in young adults and subsequent decline in general health: the Coronary Artery Risk Development in Young Adults (CARDIA) Study. *Drug Alcohol Depend.* 2007; 88:224–33. [PubMed: 17137732]



# Role of the PCP

Substance use is common and can lead to a multitude of health issues

PCPs play a vital role to assist patients with SUD as the first entry point to healthcare for most people.





# Current Challenges

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Lack of time and resources

Need for improved training

Stigma

Low incentive

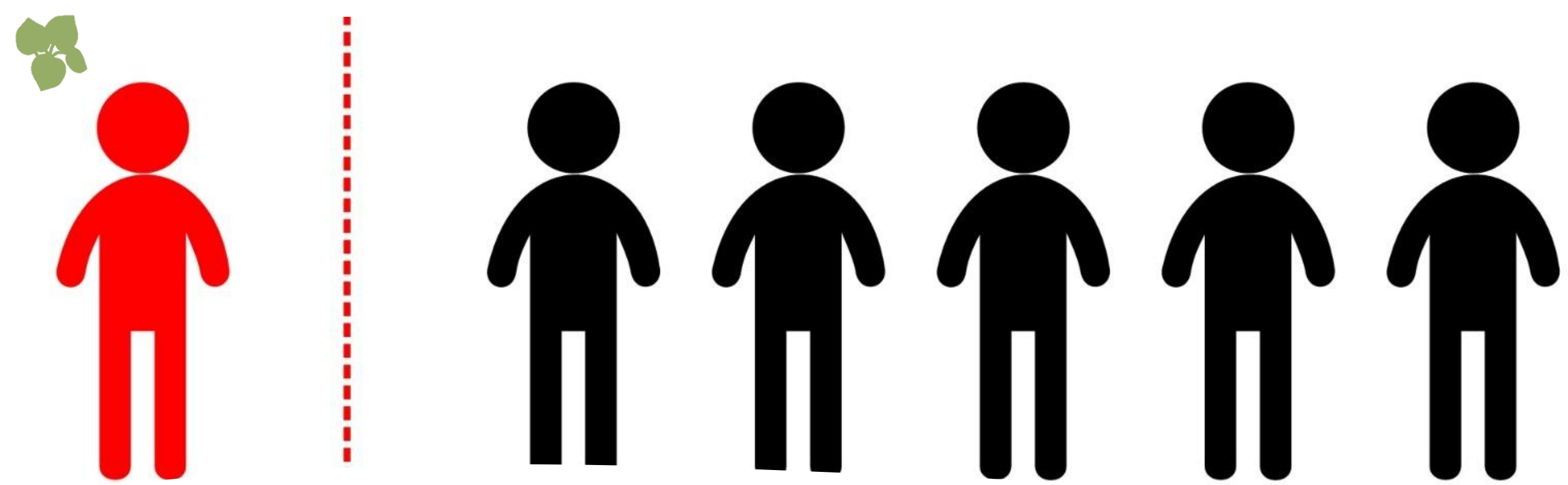
Low reimbursement

High workload

Physician shortage



<https://www.kevinmd.com/blog/2013/01/dealing-psychological-stress-doctor.html>



Unfortunately, health professionals often **lacked adequate education** and training in working with SUD patients

Leads to discrimination and suboptimal care





# Medical School Education

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According to a report from the Surgeon General, **only 8%** of medical schools had a separate required course on addiction medicine and **36%** had an elective course.

- <https://www.ncbi.nlm.nih.gov/books/NBK424848/>
- Association of American Medical Colleges. Opioid Addiction Prevention and Treatment During Required Experiences | AAMC. <https://www.aamc.org/data-reports/curriculum-reports/interactive-data/opioid-addiction-prevention-and-treatment-during-required-experiences>. Published 2022. Accessed Jan 27, 2022.
- Ari M, K et al. Teaching safe opioid prescribing during the opioid epidemic: Results of the 2018 Clerkship Directors in Internal Medicine survey. J Gen Intern Med. 2019



# Residency Education

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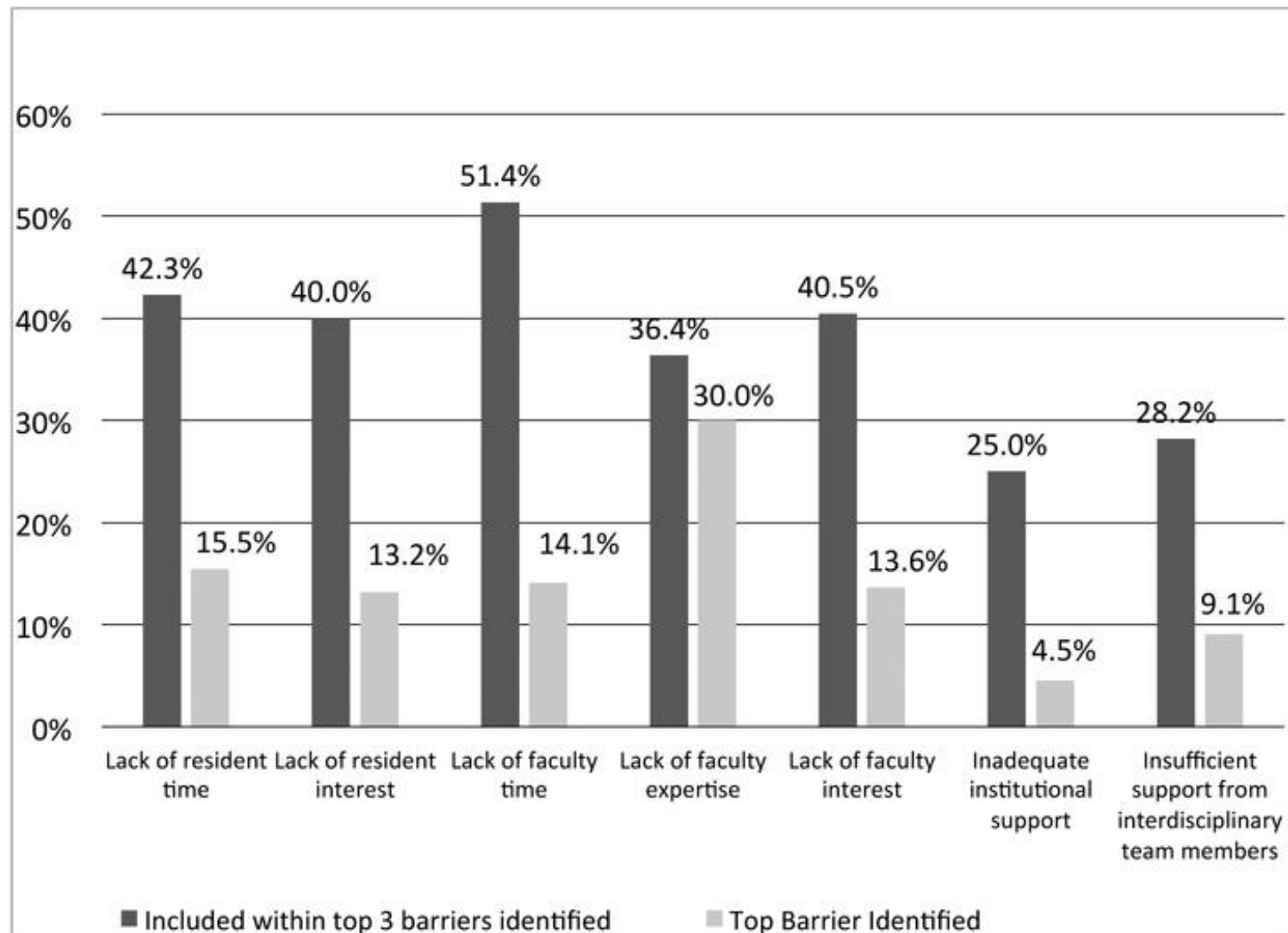


The average hours required for substance use training during a three-year residency for family medicine, internal medicine, and pediatric residents were only 12 hours, 5 hours and 4 hours respectively.

- Isaacson JH, Fleming M, Kraus M, Kahn R, Mundt M. A national survey of training in substance use disorders in residency programs. Journal of studies on alcohol. 2000;61(6):912-915.



# Barriers to Addiction Training



# Practical Challenges

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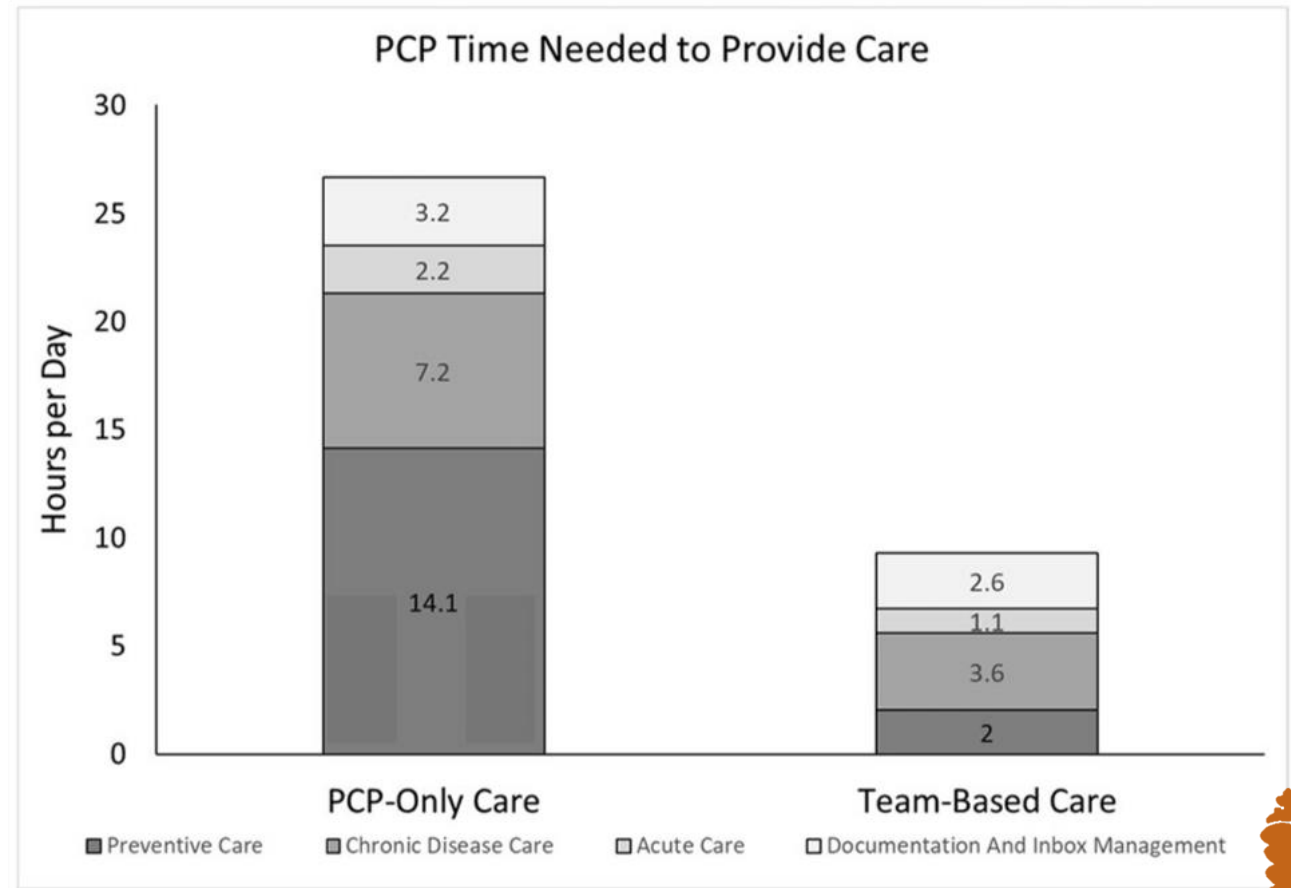
26.7 hours (16 hrs)



# Time Needed for Adult Primary Care

*“There is this sort of disconnect between the care we’ve been trained to give and the constraints of a clinic workday.”*

*Team-Based Care: Dietitian, BHS, Case manager*



## ORIGINAL RESEARCH

# Moving Away from the Tip of the Pyramid: Screening and Brief Intervention for Risky Alcohol and Opioid Use in Underserved Patients

*Kamilla L. Venner, PhD, Victoria Sánchez, DrPH, Jacqueline Garcia, MPH,  
Robert L. Williams, MD, MPH, and Andrew L. Sussman, PhD, MCRP*

**Only 25%** of primary care offices practiced universal screening for alcohol and illicit drug use.



# Why?

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There are many reasons cited for why SBIRT or other interventions are not routinely conducted including

- PCP workload
- Lack of training
- Low reimbursement for the time spent
- Lack of treatment resources

- Bobb JF, Lee AK, Lapham GT, et al. Evaluation of a pilot implementation to integrate alcohol-related care within primary care. *International Journal of Environmental Research and Public Health*. 2017;14(9):1030.
- Knox J, Hasin DS, Larson FRR, Kranzler HR. Prevention, screening, and treatment for heavy drinking and alcohol use disorder. *Lancet Psychiatry*. 2019;6(12):1054-1067.
- Yoast RA, Filstead WJ, Wilford BB, Hayashi S, Reenan J, Epstein J. Teaching about substance abuse. *The Virtual Mentor*. 2008;10(1):21-29.



## Hawai'i Physician Supply, Demand, and Shortage as of 11/2020. (Withy, 2020)

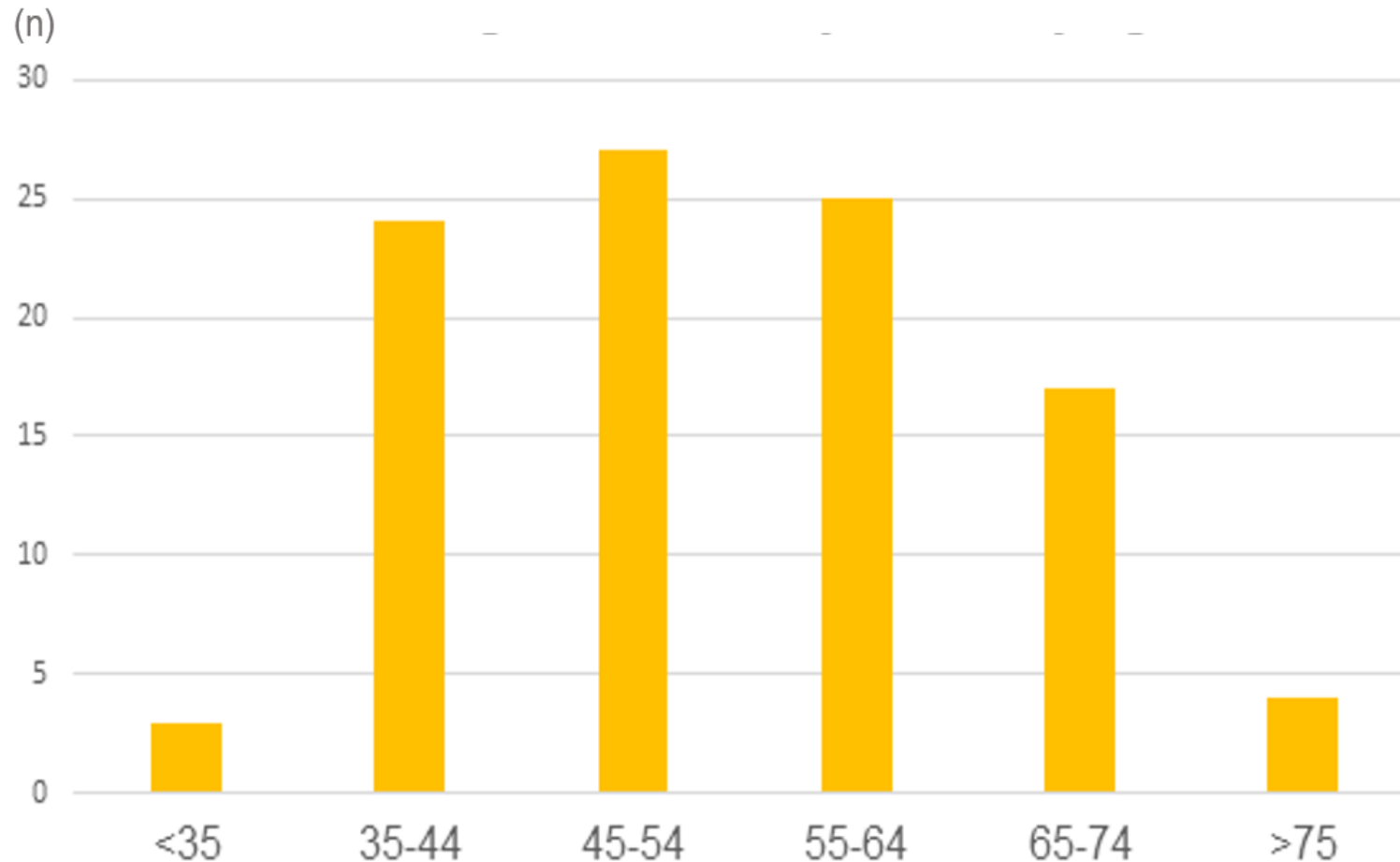
	Demand	Supply	Shortage (FTE)	Shortage (%)
Family Medicine / General Practice	536.0	342.2	193.8	36%
General Internal Medicine	499.0	319.9	179.1	36%
Pediatrics	252.5	216.1	36.4	14%
Geriatric Medicine	18.9	42.2	-23.3	(+14%)
Obstetrics and Gynecology	189.1	166.9	22.2	12%

Hawai'i has a shortage of physicians in general

All counties in the state have a PCP deficit



## Percentage of Physicians in the State of Hawai'i by Age. (Withy, 2020).



In addition to statewide shortages, Hawai'i's pool of physicians is in the “older” age group where without major intervention, not only PCPs but a shortage of all physicians may worsen further in the future.





# American Medical Students Less Likely To Choose To Become Primary Care Doctors

Nationally, medical students are decreasingly interested in going into primary care for a variety of reasons including low income compared to specialist peers and high administrative burden.

Knight V. American medical students less likely to choose to become primary care doctors. Kaiser Health News.  
<https://khn.org/news/american-medical-students-less-likely-to-choose-to-become-primary-care-doctors/>. Published 2019. Accessed.





## Lowest Avg. Annual Wage for Physicians (Adjusted for Cost of Living)

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- 47. Hawaii
- 48. Maryland
- 49. California
- 50. Massachusetts
- 51. District of Columbia

Hawai'i has one of the highest costs of living nationally, yet ranked 5<sup>th</sup> worst in the nation for lowest average annual wage for physicians in 2021.

Evolution Finance Inc. Best & Worst States for Doctors. <https://wallethub.com/edu/best-and-worst-states-for-doctors/11376#main-findings>. Published 2022. Accessed.

Hawai'i News Now. Hawai'i is still one of the worst states for doctors, new report says. Hawai'i News Now Web site. <https://www.hawaiinewsnow.com/story/37831143/hawaii-is-still-one-of-the-worst-states-for-doctors-new-report-says/>. Published 2018. Accessed.



# Disclaimer...another one!

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A full discussion on increasing physician retention and compensation, is outside the scope of this discussion!



# Evidence-Based Interventions

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Education

Telemedicine

Universal screening (SBIRT)

Pay for primary care/prevention

Incentivize trainees to pursue primary care

Team-based care

Community treatment programs



# Institutional Substance Use Disorder Intervention Improves General Internist Preparedness, Attitudes, and Clinical Practice

*Sarah E. Wakeman, MD, Genevieve Pham Kanter, PhD, and Karen Donelan, ScD, EdM*

**Education works!** PCPs are more likely to offer addiction treatment after receiving education.

Wakeman SE, Kanter GP, Donelan K. Institutional substance use disorder intervention improves general internist preparedness, attitudes, and clinical practice. *J Addict Med.* 2017;11(4):308-314.





# Telehealth



SUD patients often report feeling discrimination in PCP offices leading to discouragement to seek medical help.

Telehealth can...

- Decrease stigma
- Increase access to care for all patients, especially those in rural/underserved areas.

Studies show that telemedicine is an effective method to manage SUD patients

Substance Abuse and Mental Health Services Administration. *Rural Behavioral Health: Telehealth Challenges and Opportunities*. 2016.

Hurstak EE, Kushel M, Chang J, et al. The risks of opioid treatment: Perspectives of primary care practitioners and patients from safety-net clinics. *Subst Abus*. 2017;38(2):213-221.

Huskamp H, Busch A, Souza J, et al. How Is Telemedicine Being Used In Opioid and Other Substance Use Disorder Treatment? *Health Aff (Millwood)*. 2018;37(12):1940-1947.

Johnson NA, Kypri K, Latter J, et al. Effect of telephone follow-up on retention and balance in an alcohol intervention trial. *Prev Med Rep*. 2015;2:746-749.

Lin LA, Casteel D, Shigekawa E, Weyrich MS, Roby DH, McMenamin SB. Telemedicine-delivered treatment interventions for substance use disorders: A systematic review. *J Subst Abuse Treat*. 2019;101:38-49.



## ORIGINAL RESEARCH

# The influence of loan repayment on rural healthcare provider recruitment and retention in Colorado

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**DM Renner<sup>1</sup>, JM Westfall<sup>2</sup>, LA Wilroy<sup>3</sup>, AA Ginde<sup>2</sup>**

*<sup>1</sup>University of North Carolina Hospitals, Chapel Hill, North Carolina, USA*

*<sup>2</sup>University of Colorado, Denver School of Medicine, Aurora, Colorado, USA*

*<sup>3</sup>Colorado Rural Health Center, Aurora, Colorado, USA*

Increasing incentives, such as loan repayment programs may play a role in physicians' choice of geographic practice location.



## *Medicine and society*

# Increasing the number of rural physicians

James Rourke MD MCLSci

Rourke suggests some factors for increasing the number of physicians includes:

- Increasing numbers of medical students from the area
- Having stable practices with teams and functional referral networks
- Having improved financial incentives for practicing in the area.



## Estimating a Reasonable Patient Panel Size for Primary Care Physicians With Team-Based Task Delegation

Justin Altschuler, David Margolius, Thomas Bodenheimer and Kevin Grumbach

The Annals of Family Medicine September 2012, 10 (5) 396-400; DOI: <https://doi.org/10.1370/afm.1400>

PCP panel sizes can be expanded based on the degree of task delegation

If portions of preventive and chronic care services are delegated to non-physician team members, primary care practices can provide recommended care with panel sizes that are achievable with the available workforce.

If significant number of tasks can be delegated to non-physician team members, PCP can see ~ 1500.





# Recommendations

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# Summary of Recommendations

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Improve education for practicing physicians and trainees

Increase incentives to screen and treat patients with SUD

Address the physician workforce shortage

Use team-based or collaborative care models





# For Practicing Physicians

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We recommend...

A website to obtain information immediately and quickly to prescribe medication assisted treatment (MAT) at the point of care

Short webinars for useful tools to treat SUD (in person or virtual)

- Possible Collaboration with
  - Hawai'i State Rural Health Care Association Project ECHO (Extension for Community Healthcare Outcomes)
  - Hawai'i Addiction Conference
- With CME to increase incentive



# For Residency Training

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We also recommend addiction medicine curriculum and training experiences for **ALL primary care residents** in Hawai'i

Including mandatory DEA X-waiver training for buprenorphine and training in motivational interviewing

New physicians are prepared to manage SUD at the start of their careers



# For Medical Students

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Finally, we recommend medical schools incorporate these topics into the standard curriculum

Students will have better preparation heading into residency



# Recommendation: Pay for Primary Care

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Payers should provide additional incentives and reward physicians who care for medically and socially complex patients, such as those with SUD, as high-quality primary care for these individuals leads to decreased costs for the system in total.

RESEARCH ARTICLE

[HEALTH AFFAIRS](#) > [VOL. 29, NO. 5](#): REINVENTING PRIMARY CARE

## Primary Care: A Critical Review Of The Evidence On Quality And Costs Of Health Care

[Mark W. Friedberg](#), [Peter S. Hussey](#), and [Eric C. Schneider](#)



# Pay for Primary Care, Continued

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Expand loan repayment and scholarship opportunities

Increase reimbursement

Expand number of trainees in primary care residencies





# Inspire Future Physicians!

Support rural medicine curriculum at JABSOM

Expand current summer sessions and research opportunities sponsored by various institutions in Hawai'i to increase interest among local high school / undergraduate students in the medical profession

John A. Burns School of Medicine University of Hawai'i at Mānoa. Opportunities for Secondary School and Undergraduate College Students | John A. Burns School of Medicine. <https://jabsom.hawaii.edu/ed-programs/opps-hs-undergrad-students/>. Published 2021. Accessed December 9, 2021, 2021.

John A. Burns School of Medicine University of Hawai'i at Mānoa. High School and Undergraduate Opportunities in Research | John A. Burns School of Medicine. <https://jabsom.hawaii.edu/trainees-in-research/high-school-and-undergraduate-opportunities-in-research/>. Published 2021. Accessed December 9, 2021, 2021

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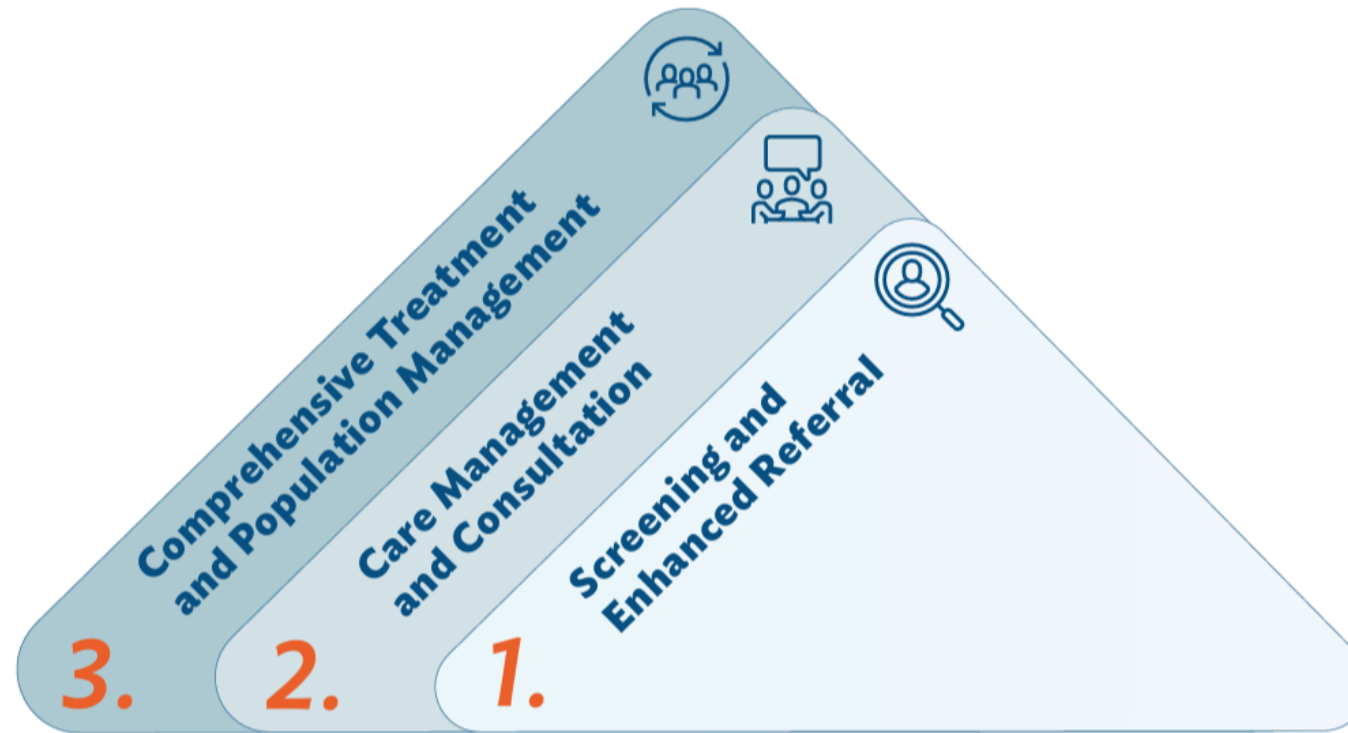
Thinking of becoming a doctor?

Watch on YouTube



# Recommendation: Integrated Medical and Behavioral Health

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# Key Process Elements of Integrated Care

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- 1. Proactive and systematic patient identification and connection to evidence-based treatment**
- 2. Team-based care by general medical & specialty behavioral health providers**
- 3. Information tracking and exchange among providers**
- 4. Continual care management**
- 5. Measurement-based, stepped care**
- 6. Self-management support**
- 7. Linkages with community/social services**
- 8. Systematic quality improvement**



# Key Structural Elements of Integrated Care

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- 1. Multidisciplinary care team**
- 2. Clinical information systems:** all care team members should have access to:
  - a) Population-based patient registry**
  - b) Shared electronic health records (EHRs)**
  - c) Inpatient and emergency department utilization data**
- 3. Patient-centered care plan**
- 4. Decision-support protocols**
- 5. Financing mechanisms**



# Collaborative Care for Opioid and Alcohol Use Disorders in Primary Care

## The SUMMIT Randomized Clinical Trial

Katherine E. Watkins, MD, MSHS; Allison J. Ober, PhD; Karen Lamp, MD; Mimi Lind, LCSW; Claude Setodji, PhD;  
Karen Chan Osilla, PhD; Sarah B. Hunter, PhD; Colleen M. McCullough, MPA; Kirsten Becker, MS; Praise O. Iyiewuare, MPH;  
Allison Diamant, MD; Keith Heinzerling, MD; Harold Alan Pincus, MD



### Effect of Integrating Substance Use Disorder Treatment into Primary Care on Inpatient and Emergency Department Utilization

Sarah E. Wakeman, MD<sup>1,2</sup>, Nancy A. Rigotti, MD<sup>1,2</sup>, Yuchiao Chang, PhD<sup>1,2</sup>, Grace E. Herman, BA<sup>3</sup>,  
Ann Erwin, MMHS<sup>4</sup>, Susan Regan, PhD<sup>1,2</sup>, and Joshua P. Metlay, MD, PhD<sup>1,2</sup>

Various studies showed collaborative care consisting of a care manager, addiction specialists and other staff led to better care of SUD patients – increase in follow up / treatment rates, decreased ED utilization

PCPs involved got support, education and advice from addiction specialists

Wakeman SE, Rigotti NA, Chang Y, et al. Effect of integrating substance use disorder treatment into primary care on inpatient and emergency department utilization. *J Gen Intern Med.* 2019;34(6):871-877.

Watkins KE, Ober AJ, Lamp K, et al. Collaborative Care for Opioid and Alcohol Use Disorders in Primary Care: The SUMMIT Randomized Clinical Trial. *JAMA Intern Med.* 2017;177(10):1480-1488.





# We have something similar already!

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Queen's Clinically Integrated Physician Network (QCIPN) Collaborative Care Model (CoCM) with psychiatrist

Care manager (CM) interviews the patients

Patients are discussed and psychiatrists make recommendations to PCPs via EMR

CM will follow the patients closely and assist them to be engaged in treatment.



# Solution to Address Multiple Challenges

We recommend adapting the existing QCIPN CoCM by substituting psychiatrists for addiction specialists to provide care for more patients.

A panel for one full time CM can be up to 50 SUD patients at any given time. Estimating that these patients require an average of six months follow up, one full time CM is capable of serving 100 patients per year.

It is uncertain at this time how many full-time primary care practices can be covered by one full time care manager (CM)

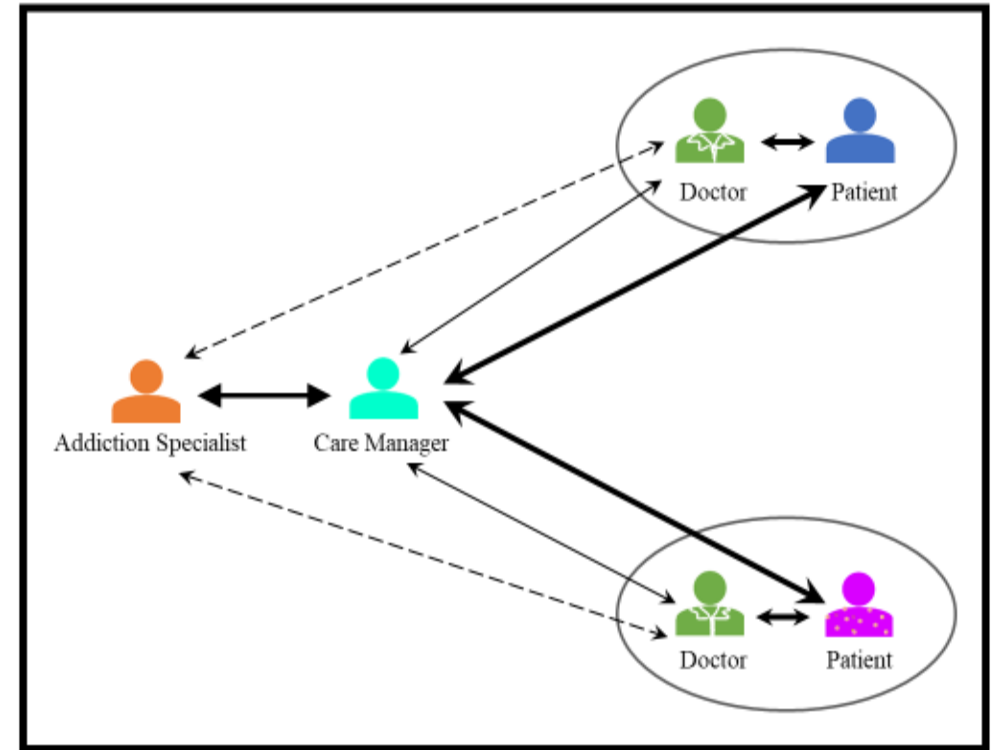


Diagram of Proposed Integrated Addiction Specialist and PCP Clinic: Collaborative care. Line thickness corresponds to frequency and depth of the encounter. Diagram by Micaiah Cape



# Conclusions

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Challenges to primary care of patients with substance use disorders:

- Lack of training
- PCP workload
- Primary care workforce shortage
- A need for a more comprehensive system of care

Recommendations to address these challenges:

- Provide better training and education
- Reward care of complex patients
- Address the healthcare workforce shortage
- Promote a team-based approach to care



# Conclusions

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Collaboration between PCPs and addiction specialists is a model that would address many of local challenges in Hawai'i in the short term.

To truly improve care for all in Hawai'i, however, systemic interventions such as adequate reimbursement, loan re-payment programs and rewards to manage complex patients including those with SUD, are essential to increase the incentive for PCPs to remain and practice in Hawai'i to take care of the population.



*Thank  
you*



### **Acknowledgments:**

We want to thank (listed alphabetically)

Bryan Brown, MD

Susy Bruno

Yoko Toyama Calistro

Jane Onoye, PhD

Jin Young Seo

Chien-Wen Tseng, MD, MS, MPH

John Valera

James Yess, MD

Jared Yurow, PsyD



# Questions?

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[kiyokawa@hawaii.edu](mailto:kiyokawa@hawaii.edu)

*A draft volume of the ADAD State Plan System of  
Care Implications Chapters is available for public  
review and comment at*

<https://health.hawaii.gov/substance-abuse/state-plan/>

